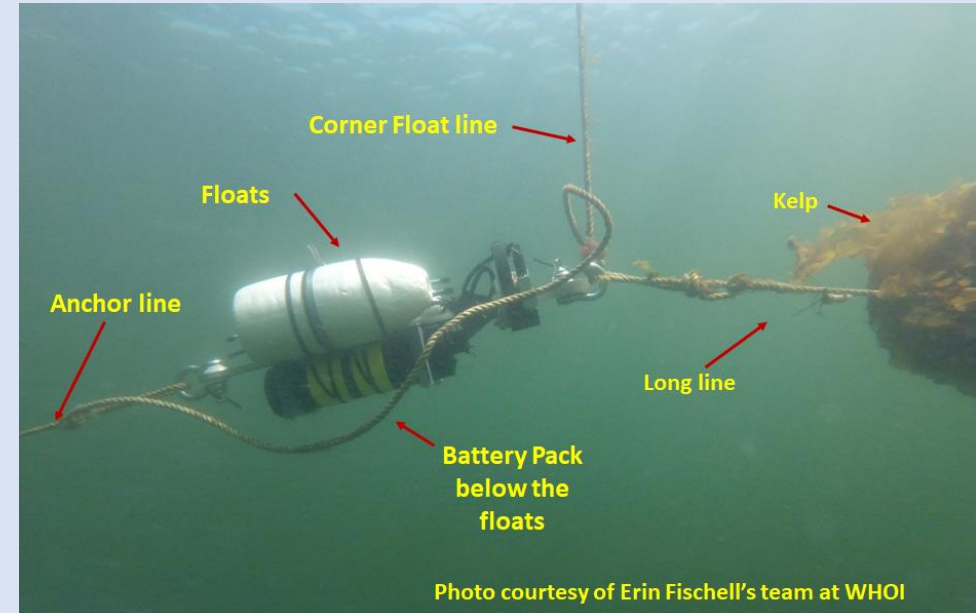
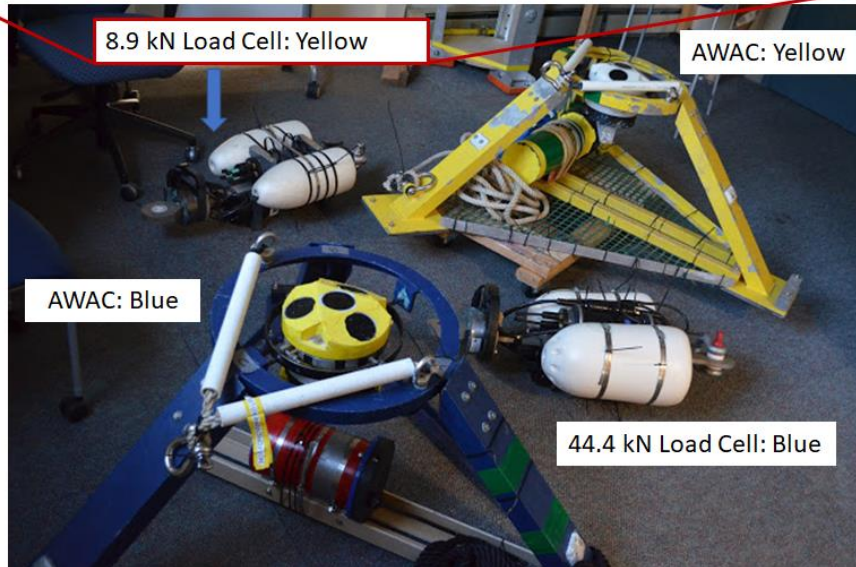
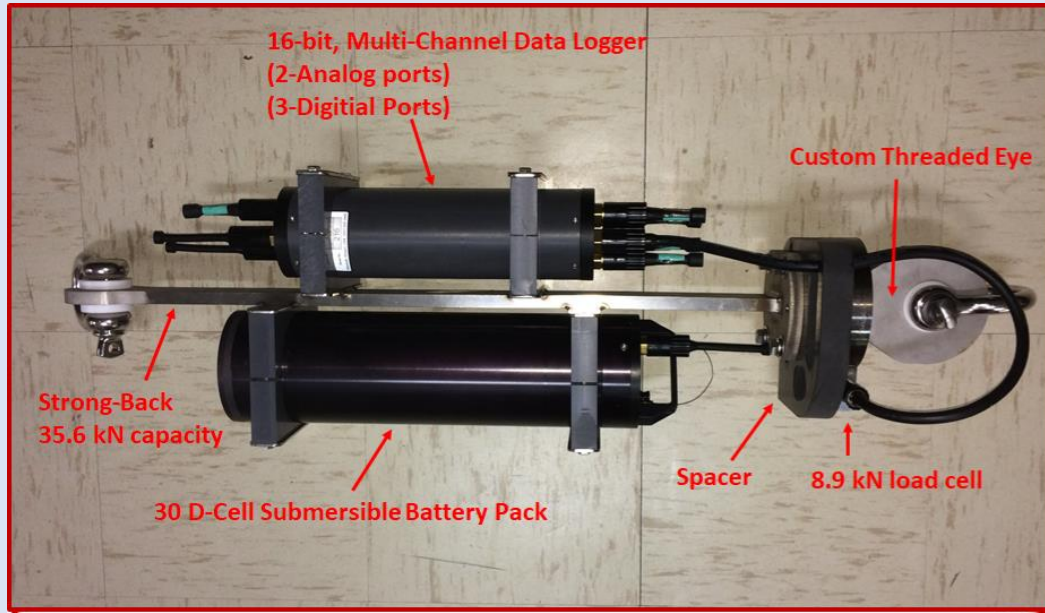


Instrumentation for validation: Load Cells and ADCPs

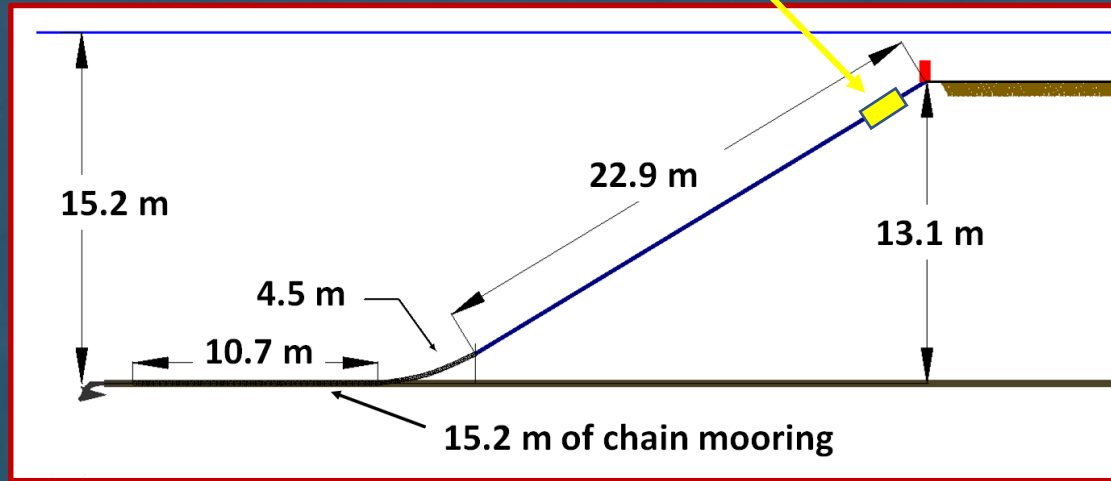


1. Water elevations
2. Velocity Profiles
3. Waves with direction
4. Mooring line tension

- Two Acoustic Wave and Current Sensors (AWACs)
- Two in-line load cells

Blue instruments – East
Yellow instruments - West

Yellow load cell on west side



Blue load cell on the east side

Corner sub. floats

East crown line

West crown line

Yellow AWAC

Blue AWAC

Ram Island

*Instrumentation deployment:
24-April-19 to 01-May-19*

Three internal marks are kelp support floats

Instrument results

- (a) Water elevations
- (b) Depth ave velocity profiles
- (c) Waves with direction
- (d) Mooring line tension

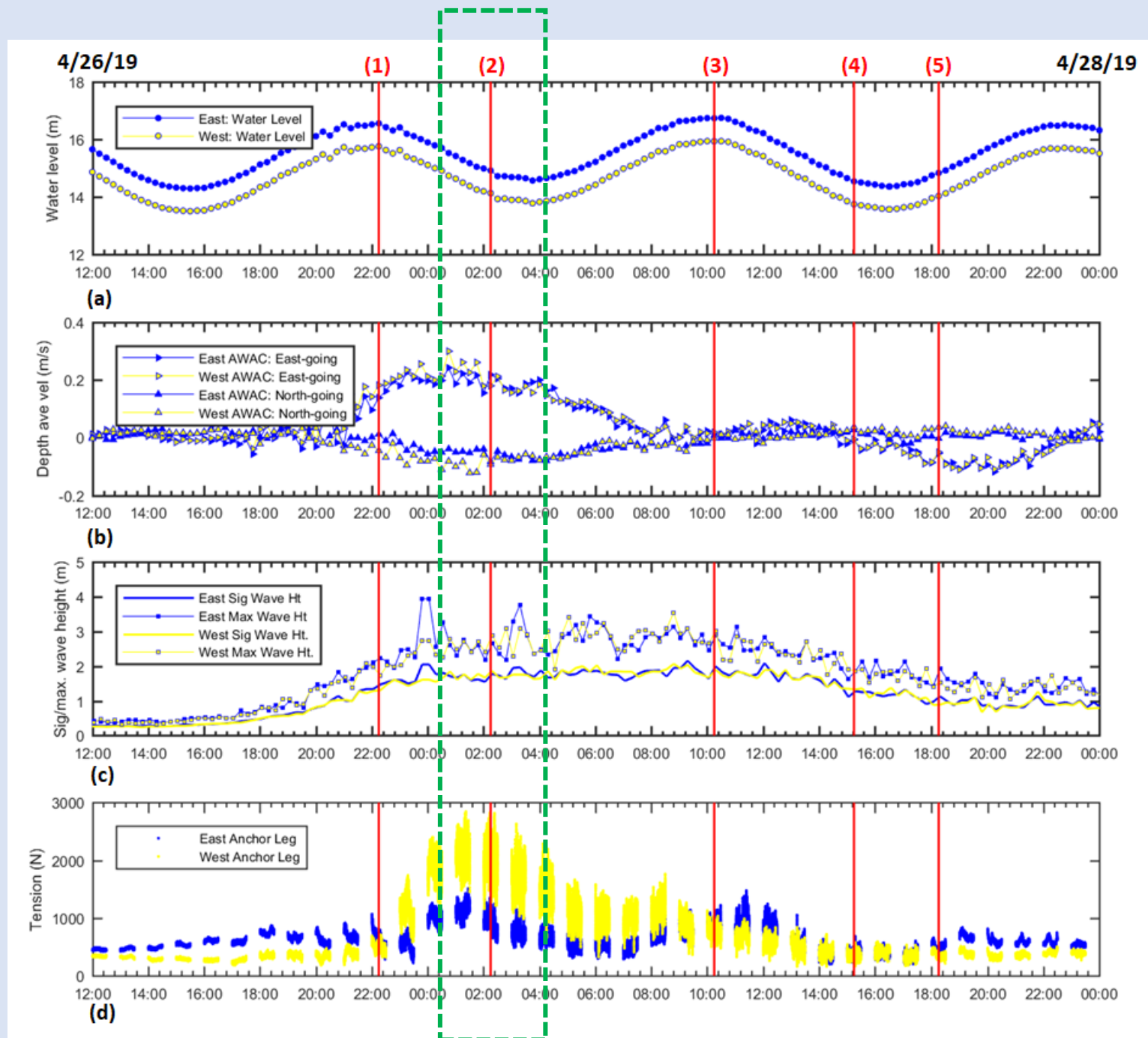


5 load cases for validation



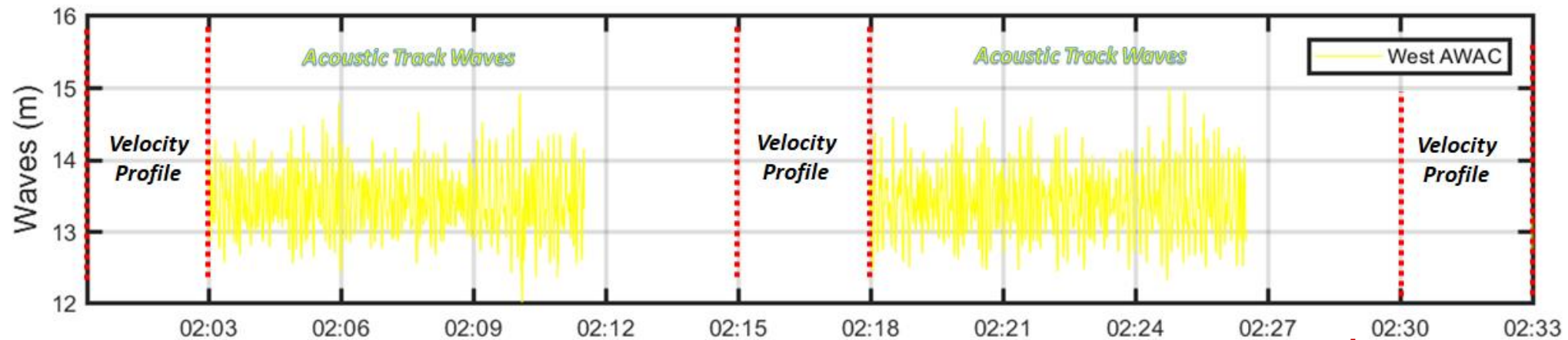
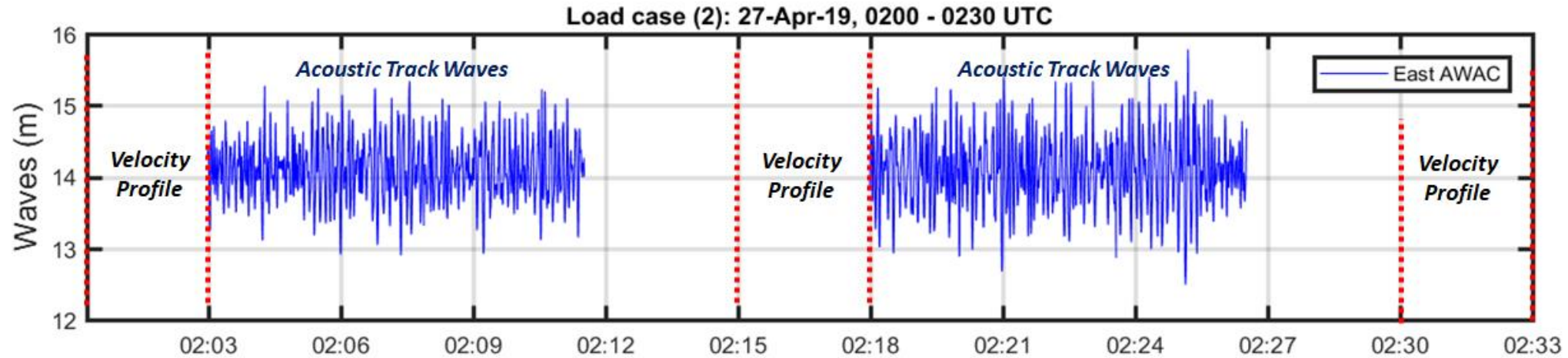
Focus on #2

{measurement and modeling fidelity}



ADCPs: Load case #2

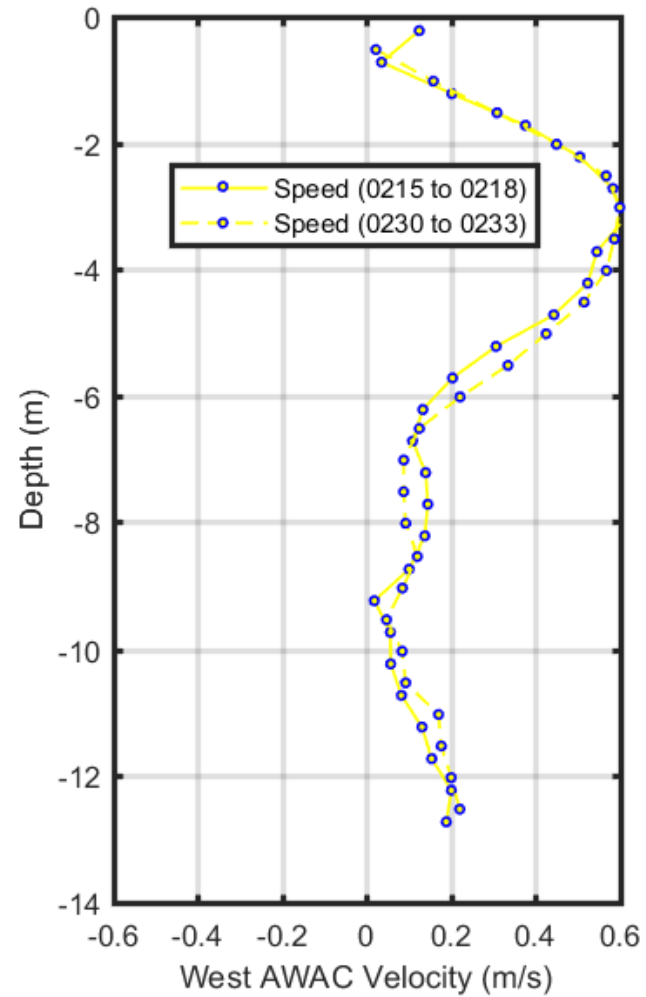
Blue AWAC Waves Going West



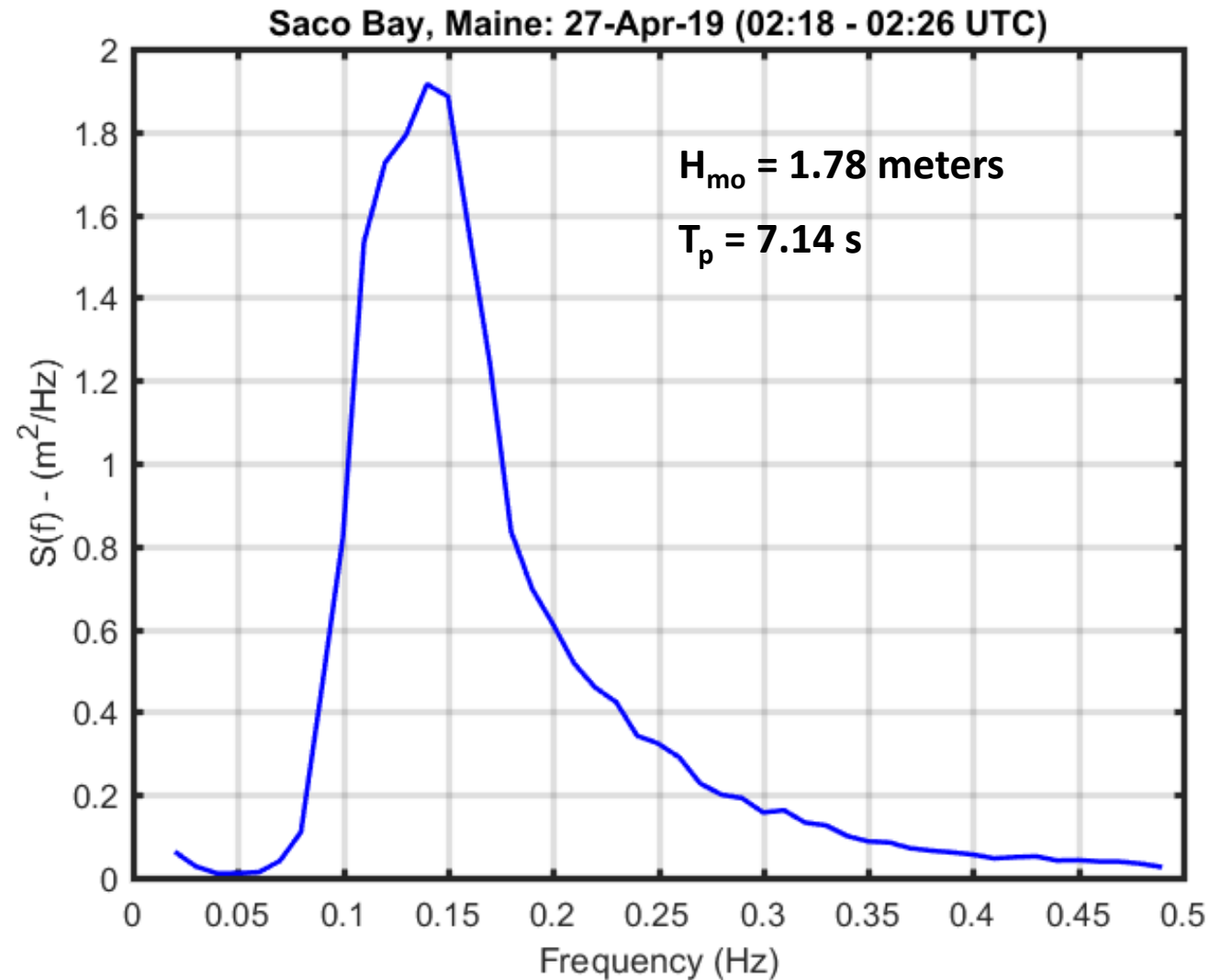
Yellow AWAC Profiles Going SE

High fidelity input to numerical model

Yellow (west) AWAC Profiles Going SE



Blue (east) AWAC Waves Going West



... and compared with load cell measurements

